

# COMPLIANCE INSPECTION AUTOMATION SOFTWARE EVALUATION REPORT

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Navy Environmental Leadership Program  
Commander, Navy Region Southwest

Submitted by:

Tetra Tech EM, Inc.  
591 Camino De La Reina  
Suite 640  
San Diego, CA 92108

## **Introduction**

This document discusses the current methodology used by the Commander Navy Region Southwest (CNRSW) Site Compliance Teams to conduct and document compliance inspections and provides an evaluation of several different compliance auditing software systems to automate the inspection process. The goal is to identify the compliance software that best suits the existing inspection process and that will reduce the data entry effort required by the current documentation system. This software evaluation report represents the first phase of a Compliance Inspection Automation project sponsored by the San Diego Navy Environmental Leadership Program (NELP). The second phase of this project will be the evaluation and demonstration of the use of a palmtop or “hand held” device to document compliance inspections.

## **Inspection Methodology**

CNRSW has established a thorough and praiseworthy internal environmental compliance inspection program. Three teams of inspectors (six inspectors at the Naval Station Complex, six at Naval Air Station (NAS) North Island, and five at the Point Loma Complex) conduct approximately 500 inspections of buildings and facilities each month.

## **Inspection Checklists**

The Site Compliance Teams have developed a set of checklists to conduct and document site inspections. These Inspection Checklists are divided into Air, Water, and Hazardous Waste media categories, and are based on permit requirements and local regulations for a specific piece of equipment or operation. For example, separate checklists have been developed for internal combustion engines, solvent parts washers, and surface coating operations. The checklists are 1 page in length, and are intended for use by individuals with a basic knowledge of environmental regulations. The checklists present regulatory and permit requirements in nonregulatory “plain language” questions, and include references for Air Pollution Control Districts rules, California Health and Safety Code requirements, and the California Code of Regulations. Examples of Inspection Checklists are provided in Appendix A.

## **Inspection Documentation**

The Site Compliance Teams have developed an Excel spreadsheet entitled “Schedule of Compliance Inspections” to schedule and track completion of inspections. For each building, a listing of the required Inspection Checklists, frequency of inspection, and a brief description of operations are provided. After the inspections are completed for a given building, the date of the inspection is manually entered into the cell in the spreadsheet at the appropriate “Building” row and “Month” column. If the inspection was conducted by a regulatory agency, the corresponding cell in the spreadsheet is colored blue. If a deficiency is identified during the inspection, a red “D” is entered into the cell next to the date of inspection. An example of the “Schedule of Compliance Inspections” is provided in Appendix B.

Each Compliance Inspector is assigned a number of buildings to inspect. To conduct an inspection at a specific building, the Inspector obtains a “Compliance Site-Specific Inspection Schedule” for the building. This schedule lists the name and number of the building to be inspected, points of contact (POC) within the building, equipment or operations to be inspected, the Inspection Checklists to be evaluated, the frequency of inspection, the applicable regulatory agency, and the related equipment permit number. An example of a “Compliance Site-Specific Inspection Schedule” is provided in Appendix C.

Compliance Inspectors review each Inspection Checklist on the Compliance Site-Specific Inspection Schedule. Compliance Inspectors stated that they typically do not fill out each checklist completely. Checklists are generally filled out only when a deficiency is noted. If a deficiency is noted, the Inspector will also complete an Environmental Deficiency Notice, which describes the nature of the deficiency and the required corrective action. A copy of the Environmental Deficiency Notice is given to the building POC. An example of an Environmental Deficiency Notice is provided in Appendix D.

Upon completion of evaluation of all checklists for a given building, the Inspector annotates the Compliance Site-Specific Inspection Schedule for the building, indicating that the checklists were evaluated, and whether any deficiencies were observed. Information from the Compliance Site-Specific Inspection Schedule is then used to update the Schedule of Compliance Inspections Excel spreadsheet as previously described. Copies of Environmental Deficiency Notices are maintained in a 3-ring binder. When a deficiency is corrected, the corresponding Environmental Deficiency Notice is updated by hand to “close out” the deficiency.

It should be noted that inspection documentation varies from Inspector to Inspector. Some Inspectors will complete an Inspection Checklist for each inspection, while some only complete the checklist if a deficiency is observed. Some Inspectors develop a detailed, narrative inspection report for each building inspected. Also, the detail of inspection record keeping varies by Complex Inspection Team.

### **Automation Opportunities**

The system of inspection documentation described above has several limitations that increase labor requirements and hinder the ability to analyze and manage inspection data efficiently. These limitations are described in detail below.

#### Data Documentation

Based on the discussion above, a Compliance Inspector must complete the following forms by hand for each building inspected:

- The Compliance Site-Specific Inspection Schedule
- Inspection Checklists
- Environmental Deficiency Notifications

Given the number of inspections conducted each month, the level of effort to complete these forms is considerable. From the documentation process described above, it is obvious that there is significant duplication of information being documented. For example, the occurrence of a deficiency must be documented on each of the above forms. The only apparent purpose of completing the Compliance Site-Specific Inspection Schedule is so that the Schedule of Compliance Inspections Excel spreadsheet, which is essentially a report, can be manually updated. In an automated system, the Inspector would complete the required Inspection Checklists for a given building in an electronic database. From this, Environmental Deficiency Notices could be generated for deficiencies and the Schedule for Compliance Inspections automatically updated to document that the inspection has been conducted.

#### Data Management and Analysis

Aside from documenting that inspections have been conducted, the current system of documentation is an impediment to effective use and analysis of inspection data. There is no ready means to determine how many deficiencies are currently open for action, or how many deficiencies have been assigned to a given building or group of buildings in a given timeframe. The current system of documentation does not allow for the

identification of trends in deficiency type or frequency, aside from the Inspector's own personal knowledge. Development of corrective/preventive actions and root cause analysis as recommended in the Navy's Draft Environmental Quality Assessment Guide can not be accomplished. This system also results in a large volume of paper that must be organized and stored, requiring additional labor.

## **Compliance Auditing Software**

Compliance auditing software has been used for years by both government and commercial organizations to assist compliance programs. In recent years, the emphasis of this software has shifted from not only being a tool to document inspections, but also to manage and analyze the results of inspections as part of an Environmental Management System (EMS). In an EMS, results of compliance inspections are used to develop management-oriented preventive actions to reduce or eliminate the recurrence of deficiencies. This process has been described as "moving beyond compliance."

This section provides an evaluation of several compliance auditing software programs. Programs were evaluated using the following criteria in order of importance:

- Ability to reduce data entry effort
- Conformance with the current inspection system, or ability to be tailored to the current system
- Cost
- Data management capabilities (reporting, corrective action tracking, trend analysis)
- Ability to be migrated to a palmtop or "hand held" platform
- Ability to be migrated to the Internet

### **"Matrix" Compliance Inspection Database**

Background. The Matrix is a Microsoft Access-based database developed internally by the CNRSW Compliance Teams. Once the program is opened, users do the following:

1. On the Main Menu, Inspectors select the Complex (Naval Station, NAS North Island or Point Loma) to be evaluated.
2. Next, the media (Air, Water, or Hazardous Waste) to be evaluated is selected, or if no deficiencies were observed during an inspection, the "No Discrepancy Form" is selected.

The function and purpose of these two screens is not clear, since the data entry screen that follows is exactly the same regardless of the user's choices, except for the "Base" field, and the "Violation" and "Violation Class" fields which contain the exact same data.

Unlike most auditing software, the Matrix does not contain or display the checklist questions evaluated. Rather, the Inspector selects the Inspection Checklist Number from a validated list on the Inspection Data Entry Form, and selects the "Violation" or deficiency, from a validated list that is generally consistent with the deficiencies that would be identified using the corresponding Inspection Checklist. Inspectors also enter the date of the inspection, the building evaluated, and can enter a comment. The program automatically selects a deficiency "Class" (A, B, or C) based on the "Violation Class" selected. However, it is possible to inadvertently select a "Violation" and a different "Violation Class." A view of the Data Entry Form is provided in Appendix E.

### Advantages

1. The matrix contains validated tables of the bases, buildings, Inspectors, Inspection Checklist Numbers, And Violations currently in use by the Compliance Teams.

2. The Matrix requires very little data entry effort. Users can select deficiencies from a validated table, reducing data entry. This functionality could be improved with further development.
3. Based on conversations with the Compliance Team, the Matrix is the preferred software program.

#### Disadvantages

1. In its current form, the Matrix is not a functioning software system. There are a number of “bugs” in the program, including:
  - Numerous data entry interface errors were encountered
  - A number of duplicative/unnecessary screens were observed
  - While the Query Switchboard would suggest that data can be sorted by Inspector Name, this function does not work
2. It is not possible to document multiple deficiencies for a single inspection event (two negative responses on a single checklist cannot be documented).
3. The software in its current form cannot generate reports.
4. Because the software does not contain the Inspection Checklists, Inspectors will likely continue to use paper checklists in the field, document the inspections by hand, and transfer them into the system. This does not alleviate the data entry burden.
5. The software is single-user, and cannot be used by multiple users on a network.

Conclusion. The Matrix Compliance Inspection Database would require additional development before it can be used to document inspections, and would require significant additional development before it can be used to effectively manage and analyze inspection data. Before this software can be considered for migration to a palmtop platform or the Internet, it must first be made functional on a desktop computer.

#### **Compliance Deficiency Management Module**

Background. The Compliance Deficiency Management Module (CDMM) was developed as part of the Defense Environmental Security Corporate Information Management (DESCIM) Program. Section 352 of the 1990 Defense Appropriations Act required the Department of Defense (DoD) to develop and maintain a comprehensive database of activities carried out to meet environmental compliance obligations. The purpose of CDMM is to track and report information about fines and penalties assessed and paid, notices of violations, compliance agreements, and the implementation of corrective actions to remedy compliance deficiencies.

Users can enter the following compliance deficiency data into CDMM:

- Evaluations (such as inspections) conducted by internal DoD or regulatory organizations. This includes the organization that conducted the evaluation, POC, date and time, evaluation type, costs, and other related information.
- Notifications (such as enforcement actions). This includes the date that the notification was received, the date headquarters was notified, estimated date of compliance, POC, the date the issuing organization concurred it had been resolved, notification type, and other related information.
- Findings of facts. This includes media, degree of severity, violation category, discovery date, protocol question number and chapter, repeat instance, finder's recommendation on corrective action, installation POC, responsible organization, and other related information.
- Fines and penalties. This includes assessed amount, potential amount, amount paid, date due, date paid, fund source, and other related information.

- Compliance agreements (CAs). This includes signature date, agreement type, termination date, completion date, POC, and other related information. It also tracks information about the scheduled items set forth in CAs.
- Tasks. This includes description of the task, fix code, the estimated completion date, actual completion date, POC, task status, and the Environmental Program Requirements (EPR) project number.

#### Advantages

1. CDMM can be used to track the correction of compliance deficiencies.
2. CDMM can identify recurrence of deficiencies.
3. CDMM can be used by multiple users on a network.
4. CDMM is available at no cost to CNRSW.

#### Disadvantages

1. The purpose of CDMM is to track and manage the resolution of environmental compliance deficiencies identified during inspections. CDMM is not an auditing or inspection tool, does not contain inspection checklists, and would be of little benefit in conducting and documenting inspections.
2. CDMM was developed as part of the Joint-Service DESCIM Program, whose goal is to develop software to satisfy the often contradictory needs of the different Services. Because DESCIM seeks consensus among the Services, the development and modification of DESCIM software is a slow process. Experience would suggest that it is unlikely that CDMM could be modified to suit CNRSW's needs within a reasonable timeframe (6-12 months).
3. The most recent version of CDMM available on the Defense Environmental Network and Information Exchange (DENIX) is dated August 8, 1997. This would suggest that CDMM is not being actively updated and maintained.

Conclusion. CDMM was developed to comply with a DoD congressional reporting requirement. It cannot be used to conduct inspections, and has limited functionality to manage or analyze data. Because CDMM can only be used to track deficiencies, its use would do little to alleviate the Inspector's data entry burden. Because it was developed as part of the Joint-Service DESCIM Program, it is unlikely that the program could be modified to suit CNRSW needs or migrated to a palmtop platform in the near term.

### **Automated Compliance Evaluation System**

Background. The Automated Compliance Evaluation (ACE) system was developed by Headquarters Marine Corps for use in its Environmental Compliance Evaluation (ECE) Program. It was subsequently adopted by the Chief of Naval Operations Shore Facilities Compliance Office (OPNAV N457) for use in the Navy's Environmental Quality Assessment (EQA) Program. ACE can be used to conduct and document inspections, identify and document deficiencies, and track and manage the resolution of deficiencies. Developed using Visual Fox-Pro, it has detailed checklists that contain all applicable Federal, state and local regulatory requirements. Users can also create their own checklists.

ACE functions as an electronic checklist that evaluators use to record compliance audit findings. The user selects a program or medium to evaluate, designates the evaluator and POC, and answers a series of checklist questions covering the requirements for that program/medium, choosing "yes," "no," "not applicable," or "not reviewed," as appropriate.

ACE has a Plan of Action and Milestones (POA&M) module used to develop and monitor the status of corrective actions, and provide this information to major claimants or higher authority in electronic format. ACE also contains a root cause analysis and problem-solving module to identify and address recurrence of deficiencies and develop programmatic solutions.

#### Advantages

1. ACE has been adopted as the standard environmental compliance auditing software by the Navy. It is currently used to evaluate compliance at Navy installations, and is available to CNRSW free of charge.
2. OPNAV N457 has earmarked funds to modify ACE to meet Navy requirements.
3. ACE has a set of flexible reports to query and sort data. ACE has the best reporting capability of all the software evaluated.
4. ACE contains powerful trend analysis tools.
5. ACE has a detailed POA&M module to track the resolution of compliance deficiencies.
6. ACE can support multiple users on a network or Internet environment.
7. Many of the Compliance Inspectors attended ACE training provided by a support contract in August 1999. The contractor obtained copies of the Inspection Checklists, and has entered them into ACE.

#### Disadvantages

1. ACE was designed for use during two-week, triennial ECEs employing teams of 8 to 14 auditors, rather than for daily, multimedia facility inspections by a single individual.
2. ACE lacks predefined "pulldown" lists of common deficiencies found in other software, and therefore requires more data entry.
3. The existing Federal and state questions contained in ACE are taken directly from the regulations without paraphrasing or summary, and can be difficult to understand. Additionally, the questions are numerous (over 11,000 for San Diego). The combined effect of a large number of frequently confusing questions makes the use of these checklists difficult.

Conclusion. ACE was designed for use in a compliance auditing program whose scope and methodology are different from the CNRSW Compliance Inspection Program. Specifically, ACE was not designed to conduct numerous weekly or monthly inspections of equipment and operations at specific buildings and facilities. Data entry shortcomings aside, ACE has the best analysis, reporting and data management capabilities of all the software evaluated. OPNAV N457 recognized that ACE was not a "perfect fit" when it adopted the system for use in its EQA Program. ACE is being modified to suit the needs of compliance inspection programs for other Navy Regions, and presumably can be tailored to meet the needs of CNRSW as well.

#### **Commercial Off-The-Shelf Software**

There are two types of commercial off-the-shelf software (COTS) available: stand alone auditing programs, and programs that contain various environmental management modules, including an auditing tool. The following is an evaluation of the two best programs evaluated from both program types.

#### **Dakota® Auditor**

Background. Dakota® Auditor (DA) is a powerful regulatory compliance tool currently used by Clorox, Shell Oil, Eastman Kodak, Lucent Technologies, and John Deere. Users create a "profile" of their facility by answering a simple set of questions. Based on the responses, DA develops a set of questions applicable to the facility. The questions are grouped by regulatory category in a logical manner and presented as "files" and "branches" similar to Microsoft Windows Explorer.

Advantages

1. DA is the most user friendly and intuitive software evaluated.
2. DA presents the questions in non-regulatory "plain English."
3. For each question, the driving regulation(s) are presented as a link to a regulatory Reference Library. DA provides a complete reference of state and Federal regulations, and a synopsis of differences between the two. Therefore, DA could be used as a regulatory reference similar to Bureau of National Affairs or Enflex reference software.
4. DA displays amendments and revisions to regulations, and can be linked via the Internet to commercial or government sites to review full-text regulations.

Disadvantages

1. A multiple user site license for DA has an initial cost of \$18,000, and requires an annual renewal fee.
2. While users can add questions, these questions become part of the Federal checklist. It would not be possible for the user to create user-defined checklists similar to the Inspection Checklists. A DA sales representative stated that such a checklist module could be created by DA programmers for an additional cost. Additional cost would also be required to modify this checklist module as permit requirements and regulations change.
3. DA has very limited reporting capabilities. Users can print a complete listing of deficiencies for a given inspection, but data cannot be queried, grouped or sorted.
4. Trends of deficiency types and frequency cannot be identified or analyzed using DA.
5. DA has limited ability to track the correction of deficiencies.
6. Modifications to the software, such as additional fields or special reports, can only be accomplished by Dakota, and DA sales personnel indicated that the cost to do so would be significant.
7. DA does not operate on a palmtop platform.

Conclusion. DA was the most sophisticated and user-friendly software evaluated for conducting and documenting inspections, and DA provides a complete reference of Federal and state regulations. However, like ACE, DA was not designed for a daily inspection program. Additionally, DA has very limited data management, analysis, and reporting capabilities. DA is extremely expensive compared with the other software evaluated, and per discussions with DA sales representatives, the cost to modify the software is considerable. DA does not run on a palmtop platform, and the cost to work with Dakota developers to create a palmtop interface would be high.

**FingerPrint<sup>®</sup> by Environment Management Compliance, Inc.**

Background. The FingerPrint software suite contains five modules which allow users to manage hazardous and nonhazardous materials, account for toxic releases, track hazardous waste, and complete required regulatory reports. One of these modules is the Audit/Inspection Module<sup>™</sup> (AIM) to conduct and document inspections.

Inspectors can use "Generic Checklists" for RCRA Part B facilities, Satellite Accumulation Areas, 90-Day storage sites and Hazardous Material Storage Areas, or can create unit-specific checklists. These checklists can be printed for use in the field. Inspections can document deficiencies, and the system can track the status of corrective actions.

Advantages

1. AIM provides simple plain language checklists complete with references. Users can create their own questions and add them to the existing "Generic Checklists."
2. AIM can be used to track corrective actions.



#### Disadvantages

1. A single user license costs \$4,700 per year.
2. AIM is bundled with several other software modules with little utility for the Site Compliance Teams.
3. AIM uses building-specific checklists rather than equipment specific checklists as used by the Site Compliance Teams. Significant effort would be required to enter the appropriate checklists for each building into AIM.
4. Trends of deficiency types and frequency cannot be identified or analyzed using AIM.
5. AIM lacks predefined “pulldown” lists of common deficiencies found in other software, and therefore requires more data entry.

Conclusion. FingerPrint was intended to provide businesses with a comprehensive management and reporting tool for hazardous materials and hazardous waste management. While the inspection module can be used to document deficiencies, it can not be used to manage or analyze data. Relative to the other software evaluated, it has no unique features, and is fairly expensive.

#### **Recommendations**

As was previously stated, the compliance software were evaluated using the following criteria in order of importance:

- Ability to reduce data entry effort
- Conformance with current inspection system, or ability to be tailored to current system
- Cost
- Data management capabilities (reporting, corrective action tracking, trend analysis)
- Ability to be migrated to a palmtop platform
- Ability to be migrated to the Internet

#### Ability To Reduce Data Entry Effort

Aside from the Matrix, none of the programs evaluated had predefined deficiency tables. The Matrix, on its own, has the greatest potential to reduce data entry without the use of a palmtop device. However, significant programming will be required to make this program fully functional.

#### Conformance With Current Inspection System and Ability To Be Tailored To Current System

ACE is a closer “fit” than either DA or FingerPrint, and the cost to modify ACE, a public domain program, would be considerably less than the cost to modify a COTS program. As was previously stated, CDMM can not be used to conduct inspections and would be difficult to modify. The Matrix contains validated tables and fields, and would be most familiar to Compliance Inspectors, but lacks the reporting capability to eliminate the duplicative data entry problem previously discussed in this document.

#### Cost

The COTS software are the most expensive, with an initial cost of up to \$18,000. Because the COTS software lacks any functions that are unique or superior to the other programs evaluated, cost prohibits them from being considered as alternatives. The Matrix Compliance Inspection Database was developed internally, and is free of charge. However, significant expense in either government labor hours or contract dollars will be necessary to give the Matrix the required functionality. ACE and CDMM are available at no cost to CNRSW, although CDMM would be very difficult to modify. Additionally, OPNAV N457 has earmarked funds to customize ACE to meet Navy installations’ needs.

Data Management Capabilities (Reporting, Corrective Action Tracking, Trend Analysis)

The COTS software and CDMM have very limited reporting and data management functionality, while the Matrix has no reporting or data management capabilities in its current form. ACE has been used to prepare a trend analysis report for deficiencies observed at all 24 active-duty Marine Corps installations during two ECE cycles. Data for 48 ECEs were analyzed and trends were identified. These data were used to develop programmatic solutions to compliance deficiencies for the entire Marine Corps.

Ability To Be Migrated To A Palmtop Platform and the Internet

None of the software evaluated currently operates on a palmtop platform, and only ACE operates on the Internet at this time.

**Recommended Alternatives**

Based on an evaluation of the software against the above criteria, the following alternatives are proposed in order of preference:

Alternative #1. Select ACE based on its cost, support from OPNAV N457 and data management capabilities. ACE has most of the required data fields, but requires significant data entry effort. However, it would seem more logical to spend funds to enhance a working software system than to correct and provide basic functionality to a system that is still under development. The data entry effort required for ACE will be alleviated by the development of a palmtop data entry form that is an electronic version of the Inspection Checklists, including the questions and references. Include “pulldown” lists of locations, POCs, and deficiencies on this palmtop form to reduce data entry and allow Inspectors to complete Inspection Checklists in the field. This data can then be downloaded into ACE to take advantage of its data management, trend analysis, and reporting capabilities.

Alternative #2. Correct and enhance the functionality of the Matrix program. As was previously mentioned, significant cost would be involved to fix the existing problems, modify the program so it can run on a network environment, and develop reports. Existing problems with this software must be corrected before a palmtop interface can be developed.

**Conclusions**

This report represents the first phase of a task to evaluate automation of CNRSW’s compliance inspection program. The second phase includes the development and demonstration of a palmtop auditing tool. OPNAV N457 has explicitly stated that it will only fund one compliance software system: ACE. Because of the potential benefit to the compliance programs throughout the Navy, it is likely that OPNAV N457 would contribute funds to the development of a palmtop module for ACE. Combined with the existing NELP funding for this project, a useful palmtop module for ACE could be developed, as well as additional reporting capability and functionality.

**APPENDIX A**  
**INSPECTION CHECKLISTS**

(2 Pages)

# AIR INSPECTION CHECKLIST ENVIRONMENTAL DEPARTMENT

## SURFACE COATING OPERATIONS

Permit # \_\_\_\_\_ Facility ID # \_\_\_\_\_

\* (IF NO PERMIT - - DESCRIBE APPLICATION EQUIPMENT & BOOTH, CATEGORIES OF ITEMS COATED, & FILL OUT COATING/SOLVENT LIST ON REVERSE SIDE OF THIS SHEET.)

Installation Name \_\_\_\_\_ Building # \_\_\_\_\_

Shop Code \_\_\_\_\_ Point of Contact \_\_\_\_\_

Permit Expiration Date [10a, b, h] \_\_\_\_\_ Posted? [10c] ..... Yes/No

Permit Conditions on Site? [21] ..... Yes/No

Equipment \_\_\_\_\_ . Same As Permit Description? [10a, b] ..... Yes/No

Equipment Operating During Inspection? ..... Yes/No

Equipment Operated In Compliance With Permit Conditions? [21] ..... Yes/No

Usage Records Maintained & On Site? [21, 67 series] ..... Yes/No

List Of Coatings & Solvents Current? [21, 67 series] ..... Yes /No

Coatings Compliant W/ VOC Limits? [67 series] ..... Yes/ No

Containers Closed? [21, 67.17] ..... Yes/No

Environmental Deficiency Notice Issued? ..... Yes/No

NOTE: Reference in (brackets) are APCD rule #'s, Health & Safety Code (HSC), or California Code of Regulations (CCR) .

Type of Coating Operation \_\_\_\_\_

Type of Application Equipment \* \_\_\_\_\_

\* [FOR SPRAY EQUIPMENT, GIVE GUN MAKE, MODEL, TYPE (such as HVLP, air atomized, etc.), GUN CLEANUP EQUIPMENT, & GUN CLEANUP SOLVENT (including VOC content). IF HVLP IS USED, NOTE IF AIR CAP PRESSURE GAUGE IS ON SITE]

COATING CATEGORY	AVERAGE USAGE/MONTH	MAXIMUM USAGE/DAY

Coatings/Solvents Information List Filled Out? ..... Yes/No

(From the back side of this checklist. The list is optional if the coating operation is permitted, uses only compliant coatings, and has a current, complete master list on site.)

Inspector's Signature \_\_\_\_\_ Date \_\_\_\_\_

AIR INSPECTION CHECKLIST  
ENVIRONMENTAL DEPARTMENTINTERNAL COMBUSTION ENGINES

Permit # \_\_\_\_\_ Facility ID # \_\_\_\_\_

\* (IF NO PERMIT - - DESCRIBE EQUIPMENT MAKE, MODEL, SERIAL #, HP RATING, FUEL TYPE, & DATE THAT ENGINE WAS FIRST  
INSTALLED ON SITE BELOW)

Installation Name \_\_\_\_\_ Building # \_\_\_\_\_

Shop Code \_\_\_\_\_ Point of Contact \_\_\_\_\_

Permit Expiration Date [10a, b, h] \_\_\_\_\_ Posted? [10c] ..... Yes/No

Permit Conditions on Site? [21] ..... Yes/No

Equipment Serial # \_\_\_\_\_ . Same As Permit Description? [10a, b] ..... Yes/No

Equipment Operating During Inspection? ..... Yes/No

Equipment Operated In Compliance With Permit Conditions? [21] ..... Yes/ No

Excessive Visible Emissions? [50, HSC 41701] ..... Yes/ No

Run Log On Site &amp; Current? [21] ..... Yes/No

Current Hour Meter Reading \_\_\_\_\_

Last Hour Meter Reading In Log \_\_\_\_\_

Hours / Year For Testing (emergency engines only) \_\_\_\_\_

Hours / Year For Testing Within Permit Limits? [21] ..... Yes/No

Fuel Type \_\_\_\_\_ Sampled? ..... Yes/No

Fuel Usage Recordkeeping Requirement In Permit? [21] ..... Yes/ No

Fuel Usage Properly Recorded? [21] ..... Yes/No

Environmental Deficiency Notice Issued? ..... Yes/No

NOTE: Reference in (brackets) are APCD rule #'s, Health &amp; Safety Code (HSC), or California Code of Regulations (CCR) .

**OTHER REMARKS/OBSERVATIONS:**

Inspector's Signature \_\_\_\_\_ Date \_\_\_\_\_

**APPENDIX B**  
**SCHEDULE OF COMPLIANCE INSPECTIONS**

(1 Page)

**SCHEDULE OF COMPLIANCE INSPECTIONS**  
**SIMA SAN DIEGO**

05-Aug-99

Regulatory Inspections

RS=reskd insp.

ACTIVITY/BLDG #	INSPECTION	SCHEDULE	PERMITS	OPERATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SIMA 61	HW1, A37, A28,	Monthly	H80655, 006248	MACHINE/OPTICAL/PRINT SHOPS	25	24	25	20	6D	7	2					
	HW12, W2		SWPPP		RS	1	25	20	6	7	2	13				
SIMA 3278	HW1, A15, A91, W2,	Monthly	005687, 921184	PUMP/VALVE/ELECTRICAL SHOP	20	25	23	RS	10D	8		2				
	HW15		H80656, SWPPP	ASBESTOS DOWNDRFT/BURN/BAKE	RS	8	23	RS	10	8		2				
SIMA 3418	HW1, A28, A49	Monthly	H80658, 005688, 007613	(8) SHOPS TURBINE, PIPE, WELD	28	24	RS	RS	12	10	28	10D				
	W2		602903, 607412, SWPPP	ABC/AC&R & SHIPFITTER	RS	24	RS	RS	12	10		10				
SIMA 3338	HW1, A27, A36, W2	Monthly	H81005, H81006, H80660	ORD, FLEX HOSE, RIGNG, SAIL LOFT	RS	2	22	RS	14	18	2	13				
			970353, H81007, SWPPP	LAGGING SHOP	RS	2	22	RS	14	18	2					
			880723, 005686		RS	2	22	RS	14	8D	2					
SIMA 37	HW1, A28, HW3, W5,	Monthly	H80662, 607315	ENGINE SHOP	27	24	31	20	13	7	26	4				
	W2		614085, SWPPP		RS	8	31	20	13	7	26	4				
SIMA 3053	HW1, A27, A28, W2	Monthly	H80663, 007163, SWPPP	ANTENNA REPAIR SHOP	RS	8	26	RS	RS	8D	9	13				
	A27U				RS	8	26	RS	RS	10	9	13				
SIMA 130	HW1, W5	Monthly	H80664	OIL LAB, NDT PHOTO LAB	26	1	22	20	11	4	27	2				
SIMA 20	HW1, A28, W2	Monthly	H81058, H80668,	OUTSIDE EQUIP. MAINT/LAUNCH	RS	2	RS	29	10	17	27	5				
			602924, SWPPP	AND RECOVERY	RS	2	RS	RS	10	17	26	5				
SIMA 3554	HW1, W5, W2	Monthly	H81008, SWPPP	HAZWASTE COLLECTION SITE	RS	4	24	28D	21	RS	9/22	6				
SIMA 86,3222	HW1, W5, A28, W2	Monthly	H80669, SWPPP	TRANSPORTATION & TOOL ISSUE	RS	2	RS	28	21	RS	9/22	6				
SIMA 123	HW1, A28, A01, W2	Monthly	H80670, 890036, 890037	SHEET METAL, CORROSION SHOP	RS	8	24	29	12	7D	23D	13				
			940301, 940175, SWPPP		RS	RS	24	29	12	18	23	13				
SIMA 3339	HW1, A28, W2	Monthly	H80927, SWPPP	COMBAT SYSTEMS (SLQ32)	27	10	RS	RS	11	10	28	2				
SIMA 17	HW1, HW5, A27U	Monthly	H80928	LIFE RAFT SHOP	21	8	17	29	13	15	2	4				
SIMA 126	HW1, A01, A28	Monthly	H81056, 607316, SWPPP	OUTSIDE MACHINE SHOP	RS	2	RS	29D	12	4/17D	28	12				
SIMA 36	HW1, W2, W4	Monthly	H81057	TECHNICAL LIBRARY	28	4	RS	RS	20	RS	26	4				
SIMA 62	W2, W4	Qtrly	SWPPP	COAST GUARD?	27	RS	RS	RS	13	7	20	6				
SIMA 245	W2, W4	Qtrly	SWPPP	VACANT	RS	2	RS	RS	RS	15	RS	12				

**APPENDIX C**  
**COMPLIANCE SITE-SPECIFIC INSPECTION SCHEDULE**  
(1 Page)



# Compliance Site-Specific Inspection Schedule

LOCATION NAVSTA  
 BUILDING 3433  
 ACTIVITY Roofing Shop  
 FIELD EPS Georgia Cruz

1 POINT OF CONTACT Webb Carson  
 PHONE NUMBER 556-8859  
 2 POINT OF CONTACT Office in 3213  
 PHONE NUMBER \_\_\_\_\_

INSPECTION DATE: 8/16/99

Description: Operations Item	Inspection Checksheet Number	E V E N T  No.	W E E K L Y	M O N T H L Y	Q U A R T E R L Y	A N N U A L	Reg. Agency	D E F I C I E N C Y	Permit Number
Asphalt Roofing Kettle (Red) <i>OK</i> <i>in yard (PR)</i>	A-03			X			APCD		007060
Asphalt Roofing Kettle (Yellow) <i>at NI-Bldg M-5</i>	A-03			X			APCD		050394
Asphalt Roofing Kettle ((Red) <i>OK</i>	A-03			X			APCD		971932 Reg. No.
<i>went to Bld 114 - BROADWAY for fuel</i> Asphalt Roofing Kettle (Yellow) <i>OK</i>	A-03			X			APCD		961029
<i>in P. yard</i> Asphalt Roofing Kettle (Red) <i>OK</i>	A-03			X			APCD		961030
Storm Water BMPs <i>OK</i>	W-2			X			SWPPP		

\* Bob.  
Victor.

\* still waiting for re-registration from Frank Williamson

Area # 110. 921002 1100 + 4 TRM10-

**APPENDIX D**  
**ENVIRONMENTAL DEFICIENCY NOTICE**

(1 Page)

**ENVIRONMENTAL COMPLIANCE DEPARTMENT  
NAVAL BASE POINT LOMA  
140 Sylvester Road, Bldg. 140  
Phone (619) 553-8566  
Fax (619) 553-8657**

## DEFICIENCY NOTICE

Date: \_\_\_\_\_  
Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Location of Inspection: \_\_\_\_\_

You are hereby notified of the following violation(s):

☐ San Diego Air Pollution Control District Rules and Regulation, Rule(s)

\_\_\_\_\_  
☐ CCR Title 22 Div 4.5

\_\_\_\_\_  
☐ Clean Water Act

\_\_\_\_\_  
☐ Other

\_\_\_\_\_  
Please be advised, corrective action must be taken to comply.

Specifically, you are required to:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Due Date \_\_\_\_\_

You must advise the Environmental Office of action taken to correct the violation within 10 working days. When compliance has been achieved, please call the undersigned at the number below or the Environmental Office at (619) 553-8566 and submit written documentation establishing compliance with the rules.

Served to \_\_\_\_\_ Title \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Inspector \_\_\_\_\_ Phone Number \_\_\_\_\_

**APPENDIX E**  
**MATRIX COMPLIANCE INSPECTION DATABASE**  
**DATA ENTRY FORM**

(1 Page)

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HAZWST INSPECTION ENTRY FORM

### HAZWST INSPECTION DATA ENTRY FORM

ID	EVENT NUMBER	DATE	BASE	COMMAND	BUILDING	INSPECTOR	AGENCY	MEDIA:	VIOLATION	CLASS	COMMENTS
[AutoNumber]											

28 29 30 31

21

1

2 3 4 5 6 7 8

**MEDIA/CHECKLIST NUMBER**

**VIOLATION**

**VIOLATION CLASS**

**BASE**  
 NAVAL STATION  
 MIRAMAR  
 ADM BAKER  
 NMC  
 NASNI  
 NAB  
 NALFIB  
 SERE  
 SCI  
 LA POSTA  
 SUBASE

**INSPECTOR**  
 ALBRECHT  
 BARAJAS  
 BERTRAND  
 CEEHORN  
 CHRISTIANSON  
 COLER  
 CRUZ  
 EDSON  
 GOODHUE  
 HALL  
 HEJKOE

**AGENCY**  
 PLNC  
 NSC  
 NIC  
 APCD  
 HMD  
 DTSC  
 RWQCB  
 EPA  
 STATE LAI  
 SDMVD  
 ECE

Record: 1 of 1

INDIVIDUAL ENTRY NUMBER

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